

## **TÁRSADALOMFÖLDRAJZ**

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TUDOMÁNYOS KÖZLEMÉNYEI XXI.  
TERMÉSZETTUDOMÁNYOK 16.  
Szombathely, 2016. pp. 47-70.*

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### **THE URBAN GEOGRAPHY OF THE CITY OF GYŐR**

#### **1. Introduction**

Our paper is an introduction to the urban geography of Győr from a historical geographical aspect, on the one hand, and from a morphological approach, on the other hand. Settlements are among the most complex products of human activity in the geographical environment, they do not stand on their own in space; their relations and their typical functions make them members of the settlement network. They are not constant; they continuously transform in the course of their history. The base plan of the settlement is the trace of these continuous changes, so the base plan carries features typical of the respective settlement. In the first part of the paper we wish to demonstrate, by the example of Győr, that the present image of settlements has been shaped by phases building on each other, and the supplementary and auxiliary elements making the image are products of a long organic development. The comprehension of them is allowed by the knowledge on the history of the settlements, only. In relation to this, we are looking for the answers to two questions:

- How have the functions of Győr changed over the centuries?
- Which are historical roots of the base plan of the city?

The second part of the study is an analysis of the building up and the functional structure of the city. This part of the work was done by empirical research, a walking of each individual street and square in the city, during which we looked at the ways the city is built up and the functional utilisation of the non-residential areas of Győr. In our paper we demonstrate

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the building up and the functional structure of the city, with a view of the similarities to and differences from the other Hungarian big cities.

## **2. The changes of the functions and population of Győr**

The urban functions of Győr, a city with more than thousand years past, have changed during history several times. Its spatial organisational role, however, is special inasmuch as it was always the centre of not only a narrower urban hinterland, irrespective of the ages. Its significance reached beyond its narrow urban environment, the boundaries of the Small Hungarian Plain, it gained and operated functions that prove its regional role. Let us see then what these functions were.

From the early times of its history it was a river crossing point, and then a bridge city after the construction of the bridges. Its excellent geographical and transportation situation was applied as soon as in the Roman times. The Romans erected a fortress in the present Káptalandomb (Chapter Hill) district for the defence of the good and necessary crossing point. Besides this fortress a military and commercial city named Arrabona was built in the 2<sup>nd</sup>-4<sup>th</sup> century A.D. Although the ancient settlement perished, the territory of Győr was possibly always inhabited. After the Romans the Avar and then the Hungarian tribes settled down and gave development a momentum.

Defence function. The presence of the fortress as a military object providing safety was important not only from military but also economic aspect. The founding king of Hungary, Holy Stephen made Győr an administrative and episcopal centre. Making use of the protection, under the safety of the fortress surrounded by plank walls, handicraftsmen and merchants settled down, so a medieval village-like settlement grew up under the castle, reinforced by tall and thin walls. After the destruction of the Tatar Invasion, King Béla IV ordered the further fortification of the city, now as a defence against the attacks of the prince of Austria. The inhabitants of the city living from handicrafts and mediatory trade were given by Stephen V a right to hold markets and staple right in 1271. The fortress protected by plank walls and the now free royal city co-existed in mutual dependence, as a single topographic unit. The fortress with its watch functions, along the Danubian waterway in the crossing of important land roads, was also a military target that attracted hostile attacks, making the city dangerous for the civil population. This frequently happened in the Small Hungarian Plain region in the vicinity of the areas under Ottoman rule. As Győr had a vital importance for the defence of Vienna, its castle was converted by Italian military engineers into a fortress significant for the whole of the Empire,

following the plans of the most up-to-date Renaissance bastions of the time. The Turks nevertheless managed to occupy the fortress in 1594, and the Hapsburgs were only able to reconquer it after four years. The significance of the castle in the Turkish times faded away in the late 17<sup>th</sup> century: after Kanizsa was taken back from the Turks, there was less need for the fortress in Győr. The further expansion of the settlement was blocked by the fortress system using too much space, while moats and gates made traffic more difficult. In 1809 the fortress walls did not even give protection against the troops of Napoleon. The breaking down of the walls was started in 1820.

Commercial functions were safeguarded by the excellent geographical position of Győr along the Danube River. The natural but manageable obstacles made the settlement a transport junction. The east to west traffic flows were driven by the narrowing marshes of the Rába and Marcal Rivers to the right bank of the Danube River, whereas the road from Fehérvár ran in this direction to the north, because the hindrance of the Sokoró Hill. The advantages offered by the westward land roads on the flood-free terraces of the southern bank was utilised by cattle traders. From Buda via Székesfehérvár ran the “Butchers’ Road” to Győr, and from the city farther to Austria. As long as cattle was the most important export goods, the city held lucrative cattle fairs in the place of the present Bisinger Alley. Merchants paid for the grass that the cattle grazed, a fee for crossing the river and also a so-called “thirtieth customs”. The heyday of the Győr cattle traders, accumulating a substantial amount of capital, was after the Turkish times. The Moson Danube Branch as a waterway was appreciated as a result of the agricultural goods production unfurling in the 18<sup>th</sup> century. Győr first collected the cereals of the Small Hungarian Plain, and later also the wheat produced in other regions of the country, the Great Hungarian Plain, Bácska and Bánát. The development of cereals trade was also given a momentum by the cereals boom in the Napoleonean wars. Győr was on the top of cereals trade in Hungary in the first third of the 19<sup>th</sup> century, after the start of steam navigation, surpassing even Pest by the middle of the century. Wheat produced in the Great Hungarian Plain was transported upstream from Győr by animal draught ships called lighters, as it was the Moson Danube Branch of the river split into three branches that was suitable for navigation. The goods had to be reloaded into smaller vessels at Gönyű and Győr, navigating up to Moson and Magyaróvár from where the goods were transported to Vienna by carriages. Because of the needs of reloading, 150 cereals storages were built in Győr, and the strengthening tradesmen’s class had a considerable organising role in cereals trade. The fortunes accumulated allowed the support of culture as well, and so the cultural and education

centre function of Győr reached beyond its market hinterland. Its Benedictian grammar school, academy of law and college of theology all had regional functions (*GYŐRI* 1999). The trade of the city living from cereals export was in crisis in the 1860s. The railway line constructed between Vienna and Pest-Buda eliminated the need for the reloading of cereals. Pest-Buda became a more and more significant economic competitor of the city of Győr.

The economic recession caused by the fall of trade was stopped by the development of industry in Győr on the turn of the century. From the former trading city Győr turned into one of the most important industrial centres of Hungary. The city made use of the construction of railways by the location of huge industrial complexes in order to replace the decreased volume of cereals trade (*BULLA–MENDÖL* 1999). The concentration of industrial functions was promoted by different location factors; also, different phases of the development of industry could be witnessed in the economic history of the city. As regards location factors, the railway junction created a link to the Austro-Hungarian Monarchy, and made the proximity of Vienna and Budapest as consumer markets a reality. Waterway could still be used for the cheap transportation of raw materials for the industry. The formerly already significant handicraft guild-industry had resulted in the accumulation of enough skills and a high level of work culture in the city, and the transforming agriculture of the Small Hungarian Plain offered the free labour force. The location of industry was greatly promoted by the forward looking city management that purchased lands from the county at a reasonable price that they partly let free of charge to the owners establishing factories and investing capital. This effort was also reinforced by the national policy that supported industry (*KASZA* 2002). The development of manufacturing industry in the city had different phases. In the time of the Monarchy – as soon as in the last decade of the 19<sup>th</sup> century – Győr acquired heavy industry and mechanical engineering also dominant in the city in later times, together with food processing industry. Maybe the most renowned representative of mechanical engineering was the Magyar Vagon- és Gépgyár Rt. (Hungarian Wagon and Machine Factory) founded in 1896, the later “Rába Factory”. The preparation for war made armaments industry an important factor in the life of the city twice. Before World War I, the Magyar Ágyúgyár Rt. (Hungarian Cannon Works) was founded, which was the most up-to-date armaments industry plant of the Monarchy at that time. In order to alleviate shipments to the factory, an industry canal was constructed between the factory and the Moson Danube Branch. Before World War II the Hungarian government announced its industrial

development (armament) programme in Győr. The war boom, however, soon turned into war destruction. The Allied forces had no less than twenty-four air attacks on Győr, because of the role of the city in armaments industry. The bombings caused more than 1,000 casualties, of the 264 industrial establishments 72 were completely destroyed, the cargo railway station and the city public utilities were heavily damaged, and warehouses were annihilated together with the port and the electric power plant (*GECSÉNYI-GÖCSEI* 1985). After the reconstructions, due to the proximity to the Western border, large-scale industrial investments neglected the city of Győr. In the name of quantitative approach, textile industry was concentrated and heavy industry went through significant developments. Even in the state socialist decades the city managed to preserve its diverse industrial structure and the traditions of industrial production were still alive. This was the basis on which, after the systemic change – mostly with the assistance of Austrian and German investors – export-oriented mechanical engineering (automotive industry) was first renewed, electronic industry was built out as a new branch of industry and the production technology of textile industry was also modernised. On the rapid and successful shift to the market economy, the proximity of the border to Austria was now an advantage, together with the motorway that reached this border in the early 1990s (*LENNER* 2012).

Győr then managed to preserve the innovative character of its economy after the systemic change, and became the most influential countryside centre of modernisation. It is now a considerable financial and business centre and the city confidently develops at regional level its – formerly deficient – functions in higher education, science, health care and public administration (*BELUSZKY* 2003).

The population of the city was approximately 32,500 people in 1870, the year of the first census. This was followed by a dynamic growth of population in the early 20<sup>th</sup> century, the number of inhabitant was doubled by the 1930s, to which a contribution was made by the population of the villages called Győrsziget and Révfalupataház, annexed to the city in 1904 (Inner breakdown of large cities – Győr 2003) (*Table 1*).

The city suffered a loss of population in World War II, and the number of population of 1941 was only reached again in the early 1950s. After 1950 the population of the city boomed, reaching 100,000 people in 1970. The growth of population was also due to the fact that the largest number of administrative changes in the city took place between 1949 and 1970. Today the number of population exceeds 130,000. The increase is mainly due to in-migration and only to a lesser extent to natural increase. In-migration was

the most intensive in the period from the 1960s to the 1980s. The direction of migration turned around in the middle of the 1990s, moving out from the city to the villages of the green belt became typical. The possibilities of this rearrangement were created by the rapid development of the agglomerating region. On the millennium the number of population in the city was 129,412, just over the number of inhabitants 11 years earlier. As regards the number of population, on the other hand, de lagging of Győr behind the other four most populated cities of Hungary has decreased.

*Table 1: Population of Győr after the annexations of settlements, 1870-2010*

Year of census	Number of population, persons	Name of settlements annexed to the city	Year of annexation
1870	32,456		
1900	45,328	Győrsziget, Révfalupataház	1904
1910	53,356		
1920	60,098		
1930	63,028		
1941	70,715		
1949	69,583	Pinnyéd	1950
1960	86,101	Bácsa	1966
1970	102,600	Gyirmót, Győrszentiván, Ménfőcsanak	1970
1980	124,130		
1990	129,331		
2001	129,412		
2010	131,267		

Source: HCSO, 2003 and 2010

### **3. Changes in the base plan**

The excellent geographical endowments of the easily crossable mouth of the Rába River was first utilised by the Romans who, in defence of their province called Pannonia, assigned a strategic role to this natural traffic junction. The walls of the rectangular fortress called ‘castrum’ were built according to the four compass directions. Beside the castrum, a military and commercial town (canabae) was located from the 2<sup>nd</sup> century AD. This settlement built southeast of the castrum, in the area between the roads running to Savaria and Brigetio, was called Arrabona by the Romans. The base plan of the castrum was typified by a preliminarily designed network of roads crossing at right angle, while the urban structure of the canabae grew spontaneously. The Roman camp and the civil city located around it were destroyed in the 4<sup>th</sup> century AD. The urban sciences researches of the

recent years with a technical focus proved that the streets of the inner city of Győr, crossing at right angle, cannot be traced back to the Roman origin. The analysis of the correlation between the orography and the urban structure of the settlement demonstrates that the coordinates and the level differences of the Roman roads and the lines of the present building up are considerably different from each other (*FÁTAY* 2011).

The castle of the early medieval times was divided into two parts on the Káptalandomb, just a few metres above the surface of the city: into an inner castle and an outer castle. The small inner part of citadel character had the role of the Bishop's palace, while the outer castle was the governor's castle with the cathedral. A brief section of its balk-structure fortification was found. The excavation revealed that the fortification was more or less built on the track of the Roman fortress walls, but the ancient building was not used for the constructions of the 10<sup>th</sup> century. The urban development of the early medieval Győr started with a double core. The urban structure of the fortress and the approximately pear-shaped area beneath it was determined by long, narrow and winding streets following the streams, and narrow radial alleyways. The houses, half dug in the earth, were erected on the higher elevations of the regularly flooded area. From the area underneath the fortress one could enter the Káptalandomb through the Rába Gate or the Danubian Gate. From the funnel-shaped squares in front of the gates one could walk up to the fortress on steep stairs breaking across the fortress wall.

The planned rectangular network of streets typical in the inner city of Győr is the work of Italian military engineers, who designed wider, straight streets with crossings at right angle to replace the winding medieval streets, because of the regular fires and for military considerations (*LOVAS* 1940). Local historians say, however, that the engineers did not create a completely new situation; they are more likely to have freed an existing old base plan in the 16<sup>th</sup> century from the houses built up on this meanwhile. Urban planners were thus actually given information on the original regular structure. The base plan of the inner city is not shaped then by the urban planning activity of the 16<sup>th</sup> century, the regular structure is from the medieval times (*BORBÍRÓ-VALLÓ* 1956). Within the main structure, on the other hand, we can see smaller streets and alleyways which cross larger blocks of the network with their zigzagging path. Such winding and narrow streets are e.g. Gyógyszertár Street and Nefelejcs Street, while Szabadsajtó Street has an inclining line. They may have served to alleviate traffic among the blocks or speed up fire extinguishing. These streets were born in the early medieval times. There was then an early medieval preliminary settlement from the

times before the foundation, whose structure was fitted into the 16<sup>th</sup> century scheme, neglecting its original functions. Similarly irregular, “fibre” structured, organically grown medieval settlements can also be found elsewhere in the Szigetköz area, following the system of dried out riverbeds (WINKLER 1998).

During the reconstruction following the Ottoman rule, streets were built up in straight lines and the new houses were built, following the Italian example, with their axes parallel to the streets, in closed blocks. People also lived around the Baroque city defended by the fortress; they were integrated into the city after the end of the war times. The independent municipality of Győr soon annexed the settlements underneath the fortress: Újváros (New City), the villages of the northern settlement ring Sziget, Révfa and Pataháza – and Szabadhegy on the south. This was the start of the settling down and reconstruction of the demolished historical outskirts, and the start of the birth of the present urban structure (Figure 1).

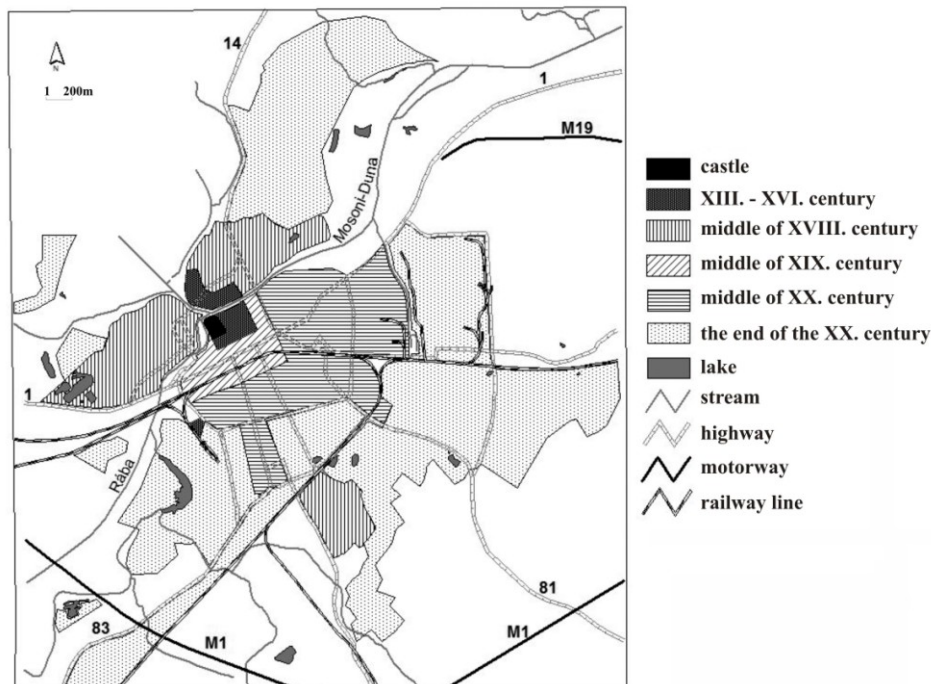


Figure 1: Development of the base plan of Győr

The “breaking down of the bastions” – the demolition of the fortress walls – in the early 19<sup>th</sup> century opened a new period in the development of the base plan of Győr. The newly freed spaces were parcelled out, the city



expanded. Each of the physical plans preserved and took further the chequered base plan. Of these plans the actually realised one is the plan that took further the regular medieval streets of the inner city in a south and east direction, without breaks. This was the way urban development followed traditions in the 19<sup>th</sup> century. The cityscape became more comprehensible. The main axis of the newly born city district now was the northern section of Baross street, turned into a promenade, (“small Baross street”), running from the Káptalándomb straight to the Fehérvár Gate existing right until 1895.

The most important of the railway lines constructed in the second half of the 19<sup>th</sup> century, the east-west Budapest–Vienna line was built across lands then uninhabited. Soon this became the southern boundary of the city. The main direction of urban development on the turn of the century was defined by the railway, and the connected railway station and the industrial zone on the eastern side of the city. By the beginning of the 20<sup>th</sup> century, the inner city expanded right to the railway. The western part of the building up long narrow stripe was called Ferencváros (Francis City), while the eastern section was named Ferdinándváros (Ferdinand City). Besides the birth of a spacious and modern inner city, urban development of the turn of the century had another great achievement: the construction of the new east-west axis of the city, Szent István (Holy Stephen) Street. The other axis perpendicular to this, Baross Gábor Street was extended southward by the bridge over the railway, opening this way the possibility of the dynamic southward expansion of the city. The cross-section of the two urban axes designated the new city centre of Győr.

The city expanded farther in two directions until World War I: south of the railway the part called Nádorváros (Palatine City), taking over big city functions, was built, while the part called Gyárváros (Factory City) expanded eastward. The development of Gyárváros was launched by the location of the wagon factory and even more so by then the settling down of the cannon works in 1913. It became the residential place of the industry workers, in the first place. The oval shaped main square in its centre, Mátyás Square is where the radial streets meet. The square is framed by spectacular corner tower residential houses, while in the radial streets the Hungarian Cannon Works had two-storey, detached workers’ houses built with rustic stone and plaster façade (*WINKLER–KURCSIS* 1998).

Between the two world wars, resources of regional development were mainly spent on the construction of public utilities and a few public buildings, and also for the establishment of roads and modern bridges easing

the traffic problems. This way the inner city became easily accessible from all parts of Győr (*HAMMER* 1936).

The restoration of the war damages and the population growth starting in the next decade promoted the development of Győr, through the construction of homes. As the most urgent problem of the city was the scarcity of homes, this was the biggest issue that had to be tackled first. This was done in three ways: by the reconstruction of the historical city parts, the construction of housing blocks and the annexation of villages to Győr. The effects of the first two are analysed in detail in the chapter on the way the city of built up, here we only remark that reconstructions had a disadvantageous impact on the look of the historical parts of the city, while the intensive housing construction wave from the northeast to the southwest markedly changed the proportion of the built-up areas: the core of the city was moved to southward. As regards the annexations of villages to Győr, the lack of sites and space in the city was eased by the annexation of the villages Bácsa and Kisbácsa to Győr in 1966. This expanded the territory of the city almost to the state border. The innermost villages of the agglomeration ring – Gyórszentiván, Gyirmót, Ménfőcsanak – were united with the city in 1970. After the unification, in-migrants seeking cheap sites showed up in the annexed villages. The historical cores of the settlements were either reconstructed or broken down, and new streets were built in addition to the existing ones.

#### **4. The building up of the city**

We have little information on the image of the Győr at the end of the Middle Ages. The regular street structure of the present downtown – which was the whole of the city at that time – was consciously designed in the 16<sup>th</sup> century, typically with densely built, usually one-storey residential houses perpendicular to the streets. Closed blocks of mostly one- or two-storey houses appeared in the present inner city from the 17<sup>th</sup> century on, including many so-called renaissance, corner balcony houses which now are the most precious monument buildings of the city. The New City, whose existence after the 13<sup>th</sup> century is proved, was demolished by the Turks and then, after the end of the Ottoman rule, this city part was reconstructed in the 18<sup>th</sup> century. Among the long streets following the direction of the Rába River, the main street had an urbanised look with closed lines of multi-storey houses; the rest more looked like village streets. Sziget and Révfalu, inhabited by fishermen, were characterised by rural settlement structure. Szabadhegy was a loosely built up vineyard at that time.

The territory of Győr grew several times during the 19<sup>th</sup> century, first by the breaking down of the city walls, later by the construction of the railway and then by the significant industrialisation. This process entailed the birth of the present urbanised image of the inner city. From the 19<sup>th</sup> century, the character of building up was more and more influenced and controlled by urban planning regulations and a conscious urban planning process. Two- or three-storey public and residential buildings were erected, one after the other. On the turn of the 19<sup>th</sup> and 20<sup>th</sup> century, the structure of building up in Sziget and Révfalu districts also became more closed and vertically diverse. The image of Győr must have been the most urbanised in its long history. As a result of capitalist development, the city also expanded southwards. The building up of Nádorváros also started, in the beginning by villas, terraced houses and two-storey semi-detached houses. Before World War I, the formation of Gyárváros started, where multi-storey blocks and one-storey workers' homes were built beside and among the factory buildings. This process continued in the period between the two world wars.

The state socialist period fundamentally changed the building up of Győr. On the one hand, multi-storey housing blocks were built, especially on the southern part of the city, considerably increasing the vertical diversity of the cityscape. On the other hand, extended city parts with detached and semi-detached houses were now in the city after the annexation of six villages to Győr and the expansion of the city. Finally, a part of the bourgeois houses built in closed blocks in the inner city fell victim to the socialist urban development and construction concepts, to be replaced by a newly built city centre. Although no new housing estates using the traditional technology were built after the systemic change, residential parks and high-class detached houses were constructed.

Two important aspects of building up is usually evaluated and considered in Hungary: one is the extent to which buildings are built into each other, the other one is the vertical diversity (*BECSEI* 1983). The building up structure of Győr shows certain peculiarities in both respects. The volume of closed blocks of buildings is low in Győr, compared to Nagykanizsa or Szombathely, and even more so to Sopron, especially as regards one-storey blocks of bourgeois homes. On the other hand, the vertical diversity of building up is larger than in the average of the Hungarian cities with county rank. The proportion of multi-storey buildings was 13.7% in 2001, and, apart from the so-called socialist cities, it was only Sopron, Kőszeg, Vác, Eger and Szeged that featured higher figures. The detailed figures of the census of 2011 have not been published yet, so we do not exactly know how many multi-storey buildings can be found in the city

now, but during our survey we saw a substantial number of new residential homes built after 2001, so we estimate the number of multi-storey residential homes to be approximately 3,400 now in Győr. To this number we have to add multi-storey public buildings that are not registered by censuses. Győr possesses a considerable number of central functions and a large number of related public institutions and buildings, which usually have more than one storey. Also taking these into consideration we estimate that the city has approximately 5 thousand multi-storey buildings, which is more than one-fifth of all buildings. The majority of the multi-storey buildings can be found in the historical city core, in the eastern part of Sziget and the southern part of Révfalu, in patches also in Gyárváros, and in the housing estates (Figure 2).

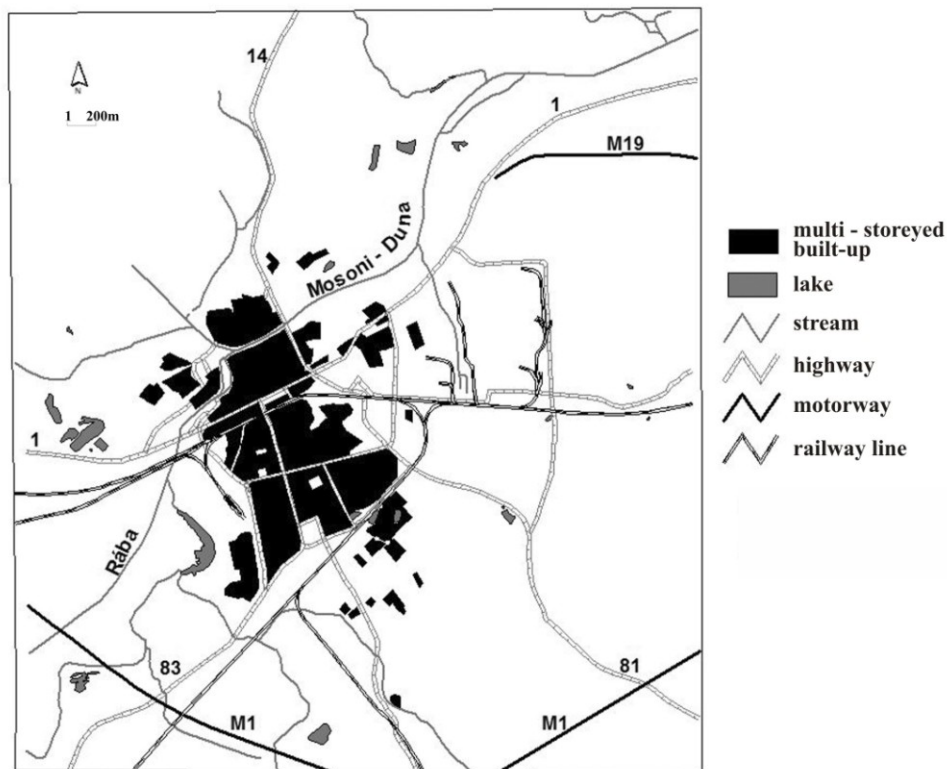


Figure 2: Areas built up with multi-storey buildings in Győr

In Győr we can see all types of constructions typical in the Hungarian countryside towns and cities (CSAPÓ 2004). The proportions of the respective types, however, reflect the characteristics of the given city coming from its historical development. Compared to the typical

proportions in the Hungarian middle and big cities, in Győr we see a lower share of one-storey housing blocks, semi-detached houses and villas. Non-contiguous one-storey blocks are almost completely missing, and houses built at right angles to the street line can only be seen in the Újváros (New City) and in patches also in the annexed villages. To the opposite, the areas taken by detached one-family houses are extended, which is mainly related to the large sizes of the annexed villages.

The typical large city structure of building up, multi-storey closed blocks can only be found in Győr in relatively small areas: in the historical city centre, the eastern part of Sziget and the southern part of Révfalu, but they can also be seen in the city part called Nádorváros, along Baross Gábor Street from the railway station to the city hospital. The city core abounds in old but neatly renovated monuments. Over the last two decades several empty sites have been built up this way, also, the old one-storey houses broken down have been replaced by closed blocks of multi-storey houses. The majority of the buildings have only one storey in the city centre and in Sziget, and they have typically 2 to 4 storeys in the eastern and southern part of the city core and in Révfalu. In the main street of the part called Újváros, a substantial number of Roma population moved into the former bourgeois houses and the condition of the buildings has worsened a lot.

Closed blocks of one-storey houses, typical of small towns, can only be seen in few places. It is only typical in the southern part of Újváros, along Kossuth Lajos Street out from Jakobinus Street, and in the area between Kossuth Lajos Street and the bank of the Rába River, but even there it is not the only style of building up, we can also see closed housing blocks built at right angles to the streets. We can also see this construction style in the northern part of Sziget, along and in the first parts of the streets running out from Mátyás Square. Finally, we can also see smaller patches of closed blocks of one-storey houses in Nádorváros, around Bem Square (*Figure 3*).

The proportion of blocks of multi-storey houses is significant in Győr. As regards its extension, it is the second most typical construction style after the one-family houses, occupying 25-30 per cent of the built-up area of the city. Its significance is indicated by the fact that almost 40 per cent of the population of Győr lives in the four large and the several smaller housing blocks of the city. The biggest of the housing blocks is the one in the city part called Marcalváros (Marcal City), the two parts of which are home to a total of 18 thousand population. Both parts were built from prefabricated concrete blocks in the 1980s, with four- and ten-storey buildings. The city part called Adyváros (Ady City) was mainly built between 1970 and 1980, it consists of larger buildings, most of which have ten storeys. Approximately

17 thousand people live here. The larger part of the József Attila housing estate was also built in the 1970s, it has more liveable medium-tall buildings with three or four storeys. The part called Nádorváros cannot be called a housing estate, but the way it is built up is similar, especially in its northern part. The majority of the residential buildings are blocks of medium-tall buildings, but there are also many smaller houses with 4 to 10 flats in blocks of two- or three-storey buildings. Half of the residential blocks were built between 1960 and 1980.

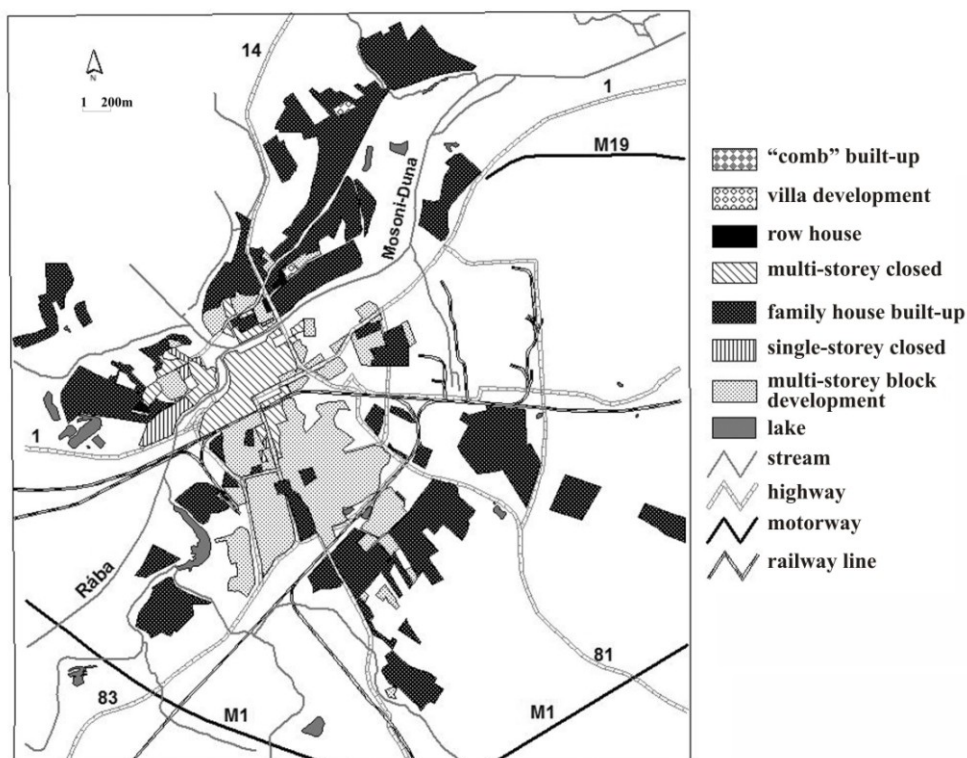


Figure 3: Styles of building up in Győr

In addition to the city quarters mentioned above, the western half of the Gyárváros part also consists of multi-storey blocks of buildings. In this quarter, around Mátyás Square we find the oldest workers' housing block of Győr, mostly with two-storey houses, built for the engineers and workers of the ex Cannon Works in the beginning of the 20<sup>th</sup> century. The Gyárváros district has old, three- or four-storey housing blocks in other places as well, often in bad condition. In the city core too multi-storey blocks were also built in the socialist decades. An example for this is the small three-storey housing block built in the eastern half of Szent István Street in the 1950s

and 1960s, the nine-storey Megyeháza (County Hall) opposite to the railway station, several ten-storey housing blocks between the National Theatre and Batthyány Square; these do not fit into the single image of the inner city. We can also find a smaller, three-storey housing block in the middle of the Sziget district, in the area bordered by Radnóti Miklós Street, Vámbéry Ármin Street and Bishop Simon János Square, and in Révfalu, around Víztorony Street and Báthori Street. In addition to the residential buildings, most public buildings, institutions and even shopping centres have been built as multi-storey building blocks.

Rows of terraced houses can only be seen sporadically, in a few patches in Győr. Only three areas with this construction style exist in Győr, usually along one single street, such as between Szalay Street and Hungária Street in the Újváros, in a section of Damjanich Street around Széchenyi Bridge and the overhead crossing in Révfalu, and also south of the Audi School in a few streets of the former village Pataháza. These terraced houses have one storey, or the attic is built up in them. Finally, in Pataháza, in Kagyló Street we can see newly built two-storey terraced houses which have been built on long sites, perpendicular to the axis of the street.

Classic bourgeois villas built before World War II are practically absent in Győr, which is rather unusual in a city with such a long past. On the other hand, in Kisbácsa and Révfalu there are brand new, individually designed and shaped large one-family detached houses that resemble villas because of their value and design. These can be seen in the vicinity of Kosztolányi Dezső Street and in the eastern part of the Pataháza district, in totally newly built up areas between Bárka Street and the Moson Danube Branch.

In almost 60 per cent of the built-up area of Győr, detached one-family houses prevail (see Figure 3). Their larger part is high-class newly built homes, but there are also old houses in bad condition in several places. The districts of detached houses transform extremely rapidly, and are rather varied as regards the age of their houses, and the condition, size and environment of the houses. There are areas with a large number of brand new, huge and demanding houses, especially on the outskirts and the annexed villages, such as in the eastern area of the Szabadhegy district, in Kismegyer, in the Ergényi housing estate in Bácsa, in the area between the Moson Danube Branch and Új Bácsai Street in Kisbácsa, and in the areas of Gyirmót and Ménfőcsanak in the proximity of Road No. 83. We can see neat garden city areas, mainly with detached houses in Likócs, in the western and northern part of Újváros, the northern area of Révfalu, and also in the larger area of Pinnyéd and Gyórszentiván, and also Gyirmót and Ménfőcsanak farther away from the main street. These villages are in the

outer residential belt around Győr. In these city districts, most houses were built 20-40 years ago, there are less new houses, their condition is average, but the stock of homes is rather heterogeneous. The oldest one-family, detached houses can be found in Gorkij district, the northern half of the Sziget district, in Gyárváros, the Szalma-telep (Hay District) and Jancsifalu. Houses are typically smaller, with simpler design and less amenities, often with a cube shape. Finally we have to mention the former small gardens that used to have weekend houses only in the past, but now have an increasing number of permanently inhabited houses. They are still loosely built up, featuring a mix of cheap wooden houses, average level one-family houses and villa-like, huge new buildings. Such areas include the Rabkert (Prisoners' Garden), Górédülő, the area between the Szalma-telep and the Győr Industrial Park, the garden in Bana Street, the northern part of Sashegyi Street and the area getting built up between the Sashegy Puszta and Road No. 81.

We can hardly see rural construction style now in Győr, i.e. houses built with their axes at right angles to the street line. It is only a few streets in Újváros and Gorkij District (Liget Street and Somos Street) where we can see a few houses like this, with hip-roof. In addition, there are a few such houses in the eastern part of the Újváros District, but they are built in blocks here, mixing with closed blocks of one-storey houses, so they have a more urban image. Although it is not a typical phenomenon in Győr and can only be witnessed sporadically, we can see rather run down, slum-like buildings as well, in the area between Kossuth Lajos Street and Bercsényi Park in the Újváros District, and also around Zúgó Street and Festő Street.

Last we have to mention the so-called residential parks which do not only represent a construction style and form of building up; they are much more residential areas with special functions (*CSÉFALVAY 2008*). The businesses operating the residential parks offer different services to the dwellers of the buildings in fenced sites. In Győr we cannot find a residential park offering such services; although these establishments are called residential parks or villa parks, none of them actually meet the relevant criteria. They all are brand new or under construction, usually with detached houses, typically in the more valuable, more aesthetic parts of the city. Examples for this type include Víziváros (Water City), Városrét (City Field) and Víztükör (Water-plane) Residential Parks on the two banks of the Moson Danube Branch, Royal Park City with three-storey housing blocks on the south part of Szabadhegy, and Mediterranean Residential Park in Ménfőcsanak, a residential park densely built up with terraced houses and multi-storey housing blocks.



## 5. The functional structure of Győr

The structure of cities was influenced and shaped by physical geographical endowments in the beginning, and later more and more by the historical development, the central functions and their changes, and in some cases also by the public or private investments and political decisions (*MENDÖL* 1963). These of course affected the present structure of Győr as well, which is similar on the whole to the structures of other big cities of Hungary inasmuch as all functional zones that are visible in the other cities are also present in Győr, but also shows several differences from them, just because of the influencing factors mentioned above (*CSAPÓ* 2005). Differences can be seen in the first place in the relative proportions of residential and non-residential areas, and in the size and even more so the proportions of the respective functional zones.

Approximately half of the built-up area of the city (including the green areas that are not qualified as built-up areas in the land use plans) is residential area, the remaining half is non-residential. The latter is a higher proportion than in the other Hungarian big cities (*Figure 4.*). This share is definitely related to the significant extension of industrial areas.

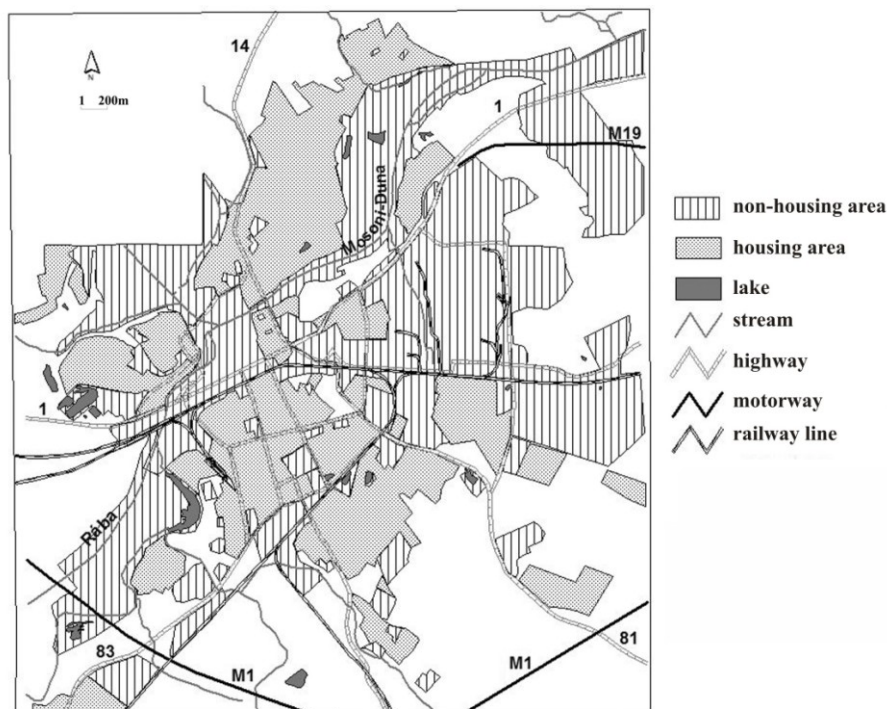


Figure 4: Location of residential and non-residential areas in Győr

Győr has a clearly designable city centre covering a relatively large area. The designation of the boundaries of the inner city of Győr was promoted by the location of non-residential buildings and the different institutions of central functions, and also by the increased density of business, commercial and service facilities. The city centre is basically the same as the former historical core of the city, but expands well beyond that by now. Its boundaries are the Rába River, the Moson Danube Branch, the Új Kapu (New Gate), Új Világ (New World), Gárdonyi Géza Road and Szent István Road, Baross Gábor Bridge and the railway, but the city also includes the eastern part of the Sziget District, the area bordered by Kossuth Lajos Street – the double Rába bridge – Petőfi Bridge, and also the campus of the Széchenyi University on the other side of the Moson Danube Branch, including the area between Hédervári Street and Rónai Jácint Street. As regards its function, the city is no longer a residential area; although there are residential buildings and flats in it, their share is gradually decreasing, and the city centre is more and more the location of institutions and buildings with different central functions. A special feature of the city centre is that it can be further divided functionally. The southern part of Révfalu is home to the university quarter, the Káptalandomb possesses the sacral part of the city, south of this, in the area within the old city wall we find the central business district (CBD) with the highest density of commercial, business and other service facilities, while the rest of the city has cultural, educational, administrative and official functions. In the city part of Győr closed blocks prevail, without a considerable vertical diversity. It is dominated by multi-storey closed blocks of houses, including several monuments.

Like in most other Hungarian middle and large cities, also in Győr sub-centres have been born which accommodate hypermarkets, specialised stores and shopping centres, with ample car parking facilities. Three hypermarkets, six specialised stores and four shopping centres have been built in Győr in the last two decades, with which Győr is the fourth among the Hungarian cities, after Miskolc, Székesfehérvár and Szeged, in a draw with Debrecen and Pécs (*CSAPÓ* 2009). The largest sub-centre of the city can be found along Road No. 83., in the proximity of motorway M1, where we find the Metro and Tesco hypermarkets, Baumax, Bricostore, Decathlon and Kika stores and a shopping centre called Family Center. Also along the Road No 1., running out of the city to the west, we find the newest shopping centre of the city, called Dunacenter. The largest shopping centre of Győr, called Árkád, was built six years ago, accommodating, in addition to 120 shops, an Interspar hypermarket and different catering facilities. This

shopping centre was built on the eastern edge of the inner city, in a former rustbelt, giving a new function and also a new chance to the city district. Not far from the Árkád, on Fehérvári road, on the edge of the Gyárváros district, in the stead of a broken down old industrial site, an Interspar hypermarket was built with an Office Depot store, south of which we find the Möbelix furniture store. Finally, between Adyváros and József Attila housing block there is the Győr Plaza with 55 shops, a Cinema City and different service facilities.

As we have already mentioned, Győr has always had significant industrial functions since the railway was built out. At the end of 19<sup>th</sup> century (1896) the Wagon Factory started to operate, followed by Rába and then, before World War I, by the Hungarian Cannon Works. The Industry Canal and the industrial railways were constructed to serve their transport needs. In the beginning of the 20<sup>th</sup> century, the Gyárváros District was built, which was extended by new areas and factories between the two world wars by the so-called Győr Programme. Following World War II, socialist industrialisation resulted in the location of a very large number of industrial plants and communal service facilities. After the systemic change huge new industrial areas were established in the eastern part of Győr, the Audi Company located here and the Győr Industrial Park was built out. On the other hand, several old factories in the vicinity of the residential areas were broken down; they were replaced by shopping centres or facilities with other functions. However, we still find industrial rustbelts in several places. The special feature of the functional structure of Győr today is that industrial zone makes a large part of the built-up area of the city, more and more concentrated to the eastern half of the settlement.

The old Gyárváros has less industrial firms now than it used to. In its southern part, and also in Jancsifalu and Szalma-telep district, the most prominent of the industrial and service companies are E.ON, Glovita gloves factory, ÉGÁZ, AGT Holding, Cardo Furniture Factory, Győr Remote Heating Company and Volán bus plant. East of the Industry Canal we find the largest, contiguous industrial area of Győr. This is the area that is home to Audi and Rába, as well as a number of smaller companies like e.g. ProMinent Ltd., Messer Hungarogáz Ltd., Ceres Baking Ltd. and Arrabona-Frigo Ltd. These days Audi is expanding eastwards. The most recent industrial area in the city is the Győr Industrial Park, established between the railway line to Budapest and the road running to Bábolna. A total of 103 companies have settled down in the park so far, including a few big ones like Propex Ltd., Katex Hungary Ltd., Nematik Győr Ltd., MAN Ltd. and Somogyi Electronics Ltd. The Győr Industrial Park was the first industrial

park in Hungary and it has been flourishing since its foundation; it offers a wide range of services. It accommodates the Audi Project and Training Centre, a Service House, and also a hotel and a restaurant. It is being expanded now; Phase 5 of the enlargement is underway.

Besides the industrial areas mentioned above, we find a few more in Győr, such as OVIT-Győr electricity plant south of the industrial park; the Waste Management Centre along Road No. 81.; the area between Kismegyér and Szabadhegy where there is a concrete factory and a machine repairing plant; the Customs Area north of the cargo railway station of GYSEV; the Waste Deposit between Road No. 83. and Górédülő; and finally the southern part of Újváros, where we find, among other things, Water and Canalisation Works, MOGÉP Ltd. and Agro-Klíma Ltd. In some places we can see smaller industrial facilities remaining as enclaves in the inner residential zone, like e.g. in Révfalu between Szövetség Street and Damjanich Street, and also in the eastern part of the inner city in the area bordered by Móricz Zsigmond Quay and Türr István Street.

Finally we have to mention the large number of run-down industrial areas which are expected to be built up in the near future, by a shift of function. Such rustbelts can be found in the western part of Gyárváros along Fehérvári Street, where the Graboplast, the Pannon Poultry Processing Company and the Textile Factory used to be. In Sziget district we find an empty, non-built-up area in the stead of the former Vegetable Oil Plant and also north of Irányi Dániel Street. The area east of Széchenyi Bridge in the part between the Moson Danube Branch and Budai Road can also be taken as rustbelt, although it is featured as construction area in the present physical plans.

The size and even more so the proportion of urban green areas lags behind that in Sopron, Veszprém or Szombathely, but is similar to that in the other Hungarian cities of county rank, on the whole. Győr is lucky inasmuch as it has many streams and lakes that are considered as urban green areas. Forests are rather scarce, actually, only the Püspök-erdő (Bishop's Forest) and the Szentiványi-erdő, favourite excursion places of the population of Győr, belong to this category. On the other hand, Győr boasts of several green areas used for sports and tourism, including boat houses along the rivers, free beaches, the Water Sports Centre and the Swimming Pool. Major sports facilities also include the Competition and Indoor Swimming Pool, the Medical, Thermal and Leisure Spa of Győr, the stadium of the football team called ETO, the Sports Centre, the Sports Hall, the Ice Rink and the Go Kart Track. Also, this category includes the Xantus János Zoo. There is a large number of public parks, woods and parked

squares in Győr, although their total territory is not large. All of these can be found in the inner areas of Győr (Bercsényi, Erzsébet, Honvéd, Kiskúti and Malom Parks, Bisinger Alley, Barátság Park, Batthyányi, Bem, Eötvös and Kálóczy Square). Finally, cemeteries are also parts of the urban green area; there are seven operating and three closed cemeteries in the city, the largest ones being the Nádorváros Cemetery, the New Cemetery in Szabadhegy, but the settlement parts called Ménfőcsanak, Bácsa, Révfalu, Szabadhegy and Sziget also have cemeteries (Figure 5).

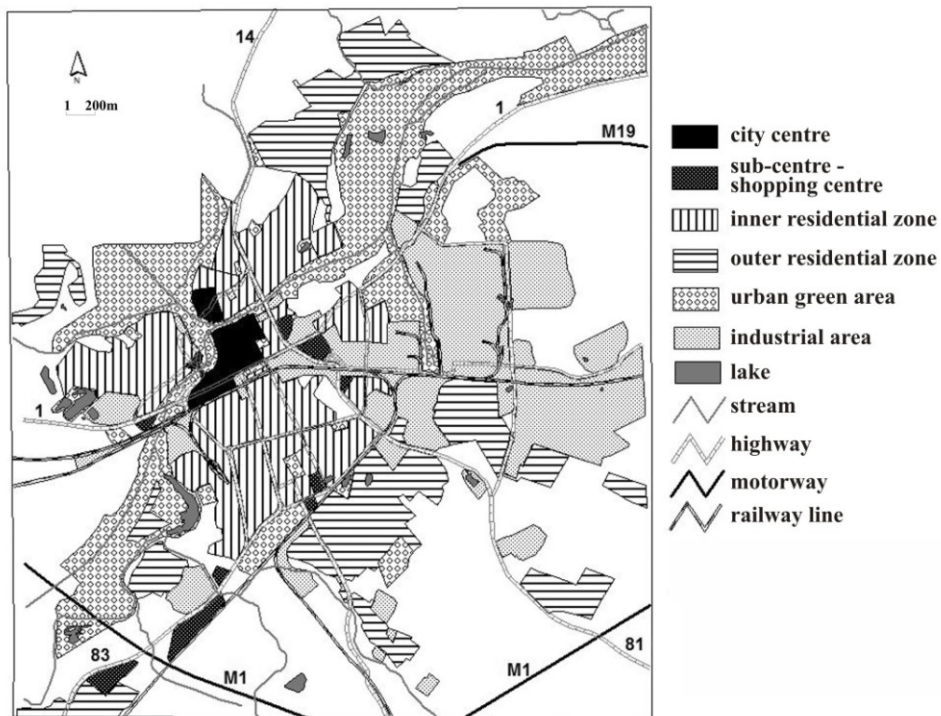


Figure 5: The functional structure of Győr

As we have stated before, residential areas make approximately half of the territory of Győr. A part of the residential area is the inner residential belt surrounding the city centre, to which the following areas belong: residential areas of Révfalu, Gyárváros and Jancsifalu, Adyváros, Marcalváros, Nádorváros, Gorkijváros, Sziget, a large part of Újváros and the area bordered by the Moson Danube Branch, the Széchenyi Bridge, the railway line, Újkapu Street and Gárdonyi Géza Street. The inner residential belt accommodates, in addition to the residential homes, mainly educational, cultural and health care institutions and commercial and catering facilities,

but we also find a few hotels and office buildings, of which there is one to be mentioned: the beautiful Leier City Center, created by the refurbishment of the former Frigyes Barracks. The inner residential belt is typically urban in appearance, i.e. it has closed blocks and a high degree of vertical diversity. Typical style is the blocks of multi-storey or one-storey houses, but one-family houses can also be found in places like Újváros, Sziget, Gyárváros and Révfalu.

The other, larger part of the residential areas is the outer residential belt. This part includes, on the one hand, the formerly independent villages annexed to Győr: Bácsa, Újbácsa, Gyirmót, Ménfőcsanak, Pinnyéd and Gyórszentiván, but the outer residential belt also has Likócs, Szabadhegy, Kismegyér and Sárás, and all the former small gardens which become more and more inhabited. The outer residential belt has a much more purely residential function than the inner residential belt has. It is much more loosely built up, and the vertical diversity is also low, except for the József Attila housing estate. This belt typically has one-family, detached houses, but we also find in some places multi-storey house blocks and terraced houses; also, residential parks have been built here.

## **6. Summary**

Győr responded to the different challenges of the historical times by a continuous renewal. The base plan of the city is closed, surrounded by clear-cut boundaries. The historical core of the settlement – Belváros, Újváros, Sziget and Révfalu – is located in the northern third of the city. The streets meeting at right angles in the inner city do not originate from the Roman times; they are from the Middle Ages. The expansion of the territory of Győr in the 20<sup>th</sup> century – approximately two-thirds of the total territory of the city – took place on the higher, flood-free elevations farther away, southeast from the rivers.

Győr has a basically urban building up structure, but it has a special feature: as opposed to the other middle and big cities of Transdanubia, the city is less homogeneously built up horizontally and more diverse vertically. Among the styles of building up, the largest areas are taken by the detached houses, but the share of multi-storey blocks is also significant; on the other hand, villas, non-contiguous one-storey housing blocks and terraced houses are absent or rare.

The functional structure of Győr resembles that of the typical big cities. The city core is developed and large, and can be divided into parts. There are four large, peripheral shopping zones in the city that took away a part of

the commercial functions of the city centre. The extent of industrial areas is huge, in line with the industrial functions of Győr which are unmatched in Hungary. As regards residential areas, the outer one is bigger, the main reason for which is the large number of settlements annexed to Győr.

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